

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of

Review of the Commission's Part 95 Personal Radio Services Rules	)	WT Docket No. 10-0119
	)	
	)	
1998 Biennial Regulatory Review – 47 C.F.R. Part 90 – Private Land Mobile Radio Services	)	WT Docket No. 98-182 RM-9222
	)	
Petition for Rulemaking of Garmin International, Inc.	)	RM-10762
	)	
Petition for Rulemaking of Omnitronics, L.L.C.	)	RM-10844

**Reply Comments of the  
Personal Radio Steering Group, Inc.**

**Summary**

The Commission should dismiss the arguments by Uniden, Garmin and others in favor of the use of voice-obscuring technologies in the personal radio services. The illusory “privacy” and “security” proffered by voice-obscuring features are flatly inconsistent with the necessary frequency-sharing requirements of GMRS.

Because of Garmin's abusive marketing practices of GMRS transceivers capable of non-voice emissions, the Commission should revoke the waivers granted to Garmin to manufacture and to market transceivers capable of non-voice GMRS operation. The Commission should immediately abandon or at least postpone any further consideration of expanding the permissibility of GPS- or other text- or data-based communications in the GMRS, pending an intensive and fully public inquiry into the public and governmental needs for this capability, and how best to provide for it.

The Commission should terminate any consideration of increasing the transmitter output power or the number of channels available for unlicensed use in the FRS. No party who submitted comments discussed the interference potential of higher power FRS to GMRS communications.

The Commission should retain licensing in the GMRS. Implementing license-by-rule would suggest the Commission's abandonment of GMRS rules enforcement.

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## **REPLY COMMENTS**

### **I. Background of this Commenter**

1. The Personal Radio Steering Group, Inc. is a national advocate for licensees in the GMRS, and for users in the other Personal Radio Services.

### **II. Channel Sharing and Voice Obscuring.**

2. From nearly the very earliest days of what are now known as the Private Land Mobile Radio Services (PLMRS), the Commission has had to be concerned with how to encourage co-channel users to share the available frequencies. Monitoring before transmitting to avoid causing interference is central to this effort.

3. Recent technological developments have provided automatic (user transparent) sharing through trunking and schemes such as time-division and code-division multiplexing, but these are not authorized in the GMRS, FRS, CBRS or MURS.

4. The situation for personal and family users in the personal radio services does not lend itself to such solutions given the current technology. Users with such family or personal needs must share the same channels. They make sharing decisions based on complex algorithms used in conventional voice exchanges in social settings.

5. In this situation, users decide about sharing (yielding, interrupting, etc.) based on the likelihood of causing a disruption, the proximity of those communicating, and the nature and urgency of the message (based on the communications content, the tone and inflexion of the voices, etc.). The “urgency level” can range anywhere from the “frivolous” to the “emergency.”

6. This “frivolous-to-urgent” index is a broad continuum, and the Commission provides only the most general guidelines at the extremes. At the one extreme, the rules prohibit transmissions intended merely to entertain or to amuse. At the other extreme, the rules require that users yield to communications directly concerning the safety of life or the protection of property.

7. Now comes Uniden (Further Comments, page 6) alleging that users of the personal radio services need consider *only* the presence or absence of a signal on the frequency. Uniden alleges that with voice inversion, “the cadence of the speech is not changed and ... it is easy to surmise what is happening in the conversation ....” Further, Uniden argues that “voice inversion” does not hide anything.” Uniden makes a vague, unsubstantiated allegation that “voice inversion has clearly been a popular feature that enhances the utility of GMRS, and is in demand by the public, and carries no harm.”

8. **Uniden could not be more wrong!** It *does* harm, because it obscures the content of communications, and thus renders more difficult or impossible the task of deciding about frequency sharing. Merely because it is “popular” does not justify its use. Unlimited freeway speed limits are “popular.” Avoiding seatbelt use is “popular.” CB “sliders” (variable frequency oscillators) and linears (amplifiers) are “popular” in the CB community, but there is a clearly demonstrated need for the authorities to prohibit them. Moreover, if anything about voice inversion is “popular,” it is the widespread resentment by licensees towards its use in GMRS and FRS.

9. The Commission's concern and argument are clear and correct:

“... any type of technique such as scrambling, encryption, inversion, or masking that hides, obscures, or confuses the voice message such that it cannot be readily understood by any listener ... is prohibited.”

10. All conscientious radio operators need to know the content of co-channel communications, in order to understand whether it is necessary to continue to yield, or whether it would be reasonable to interrupt. Furthermore, those in the process of communicating need to know if they must yield to more urgent communications.

11. In this context, *any* form of voice obscuring or communication other than in *plain language* must be prohibited. In the personal radio services, there can be no expectation of privacy or security. A few personal radio users may desire such privacy or security. Unfortunately, the radio manufacturing industry offers enhancements which suggest some degree of privacy or security is available or appropriate when they label selective addressing features as providing “a private line” or “a private channel” or “a quiet channel.” The naming and use of such selective-addressing techniques suggests that the use of such technologies (which may be an appropriate function to initiate a communications exchange) can properly be used for “voice obscuring” or “voice ignoring.”

12. The Commission is entirely correct to require “plain language” communications, and to prohibit any technical form of “voice obscuring” in the personal radio services. Persons desiring privacy and/or security need to choose a radio service, such as cellular telephone, where such capability is provided automatically and unobtrusively.

### **III. Uniden's Proposals are Unworkable.**

13. In the NPRM (at paragraph 16), the Commission asked that

“If commenting parties support higher levels for certain applications, they should explain the technical basis for the higher power and provide analysis for the associated impact on interference potential.”

14. Several parties recommended increasing the output power of FRS radios to 2 watts, but none discussed the associated impact on the potential for interference specifically to GMRS communications, as the Commission had requested. To increase the FRS transmitting power would be contrary to the Commission's intent that the FRS should be a *very* short-range radio service (47 CFR 95.401(b)).

15. Uniden argues (Further Comments, pages 8 and following) for the following changes in the FRS, amongst others:

“Maximum 2-Watt ERP on all 22 channels. ...

No license required for any channel used under the FRS.

Analog Voice Inversion allowed for any channel used under the FRS.

Subaudible data for purpose of establishing communications, identifying callers, or other short-text messaging to be allowed for any channel used under the FRS.”

And

“The relatively low maximum power limit, while higher than the existing FRS limit, in combination with the narrowbanding requirement for all channels, should provide adequate protection against interference to units operating under the GMRS.” [Uniden Further Comments at page 9.]

16. But Uniden fails to explain how this interference would be avoided.

17. Uniden also claims that the FRS can and should be used “on a secondary basis” on channels shared with GMRS, but provides absolutely *no* explanation as to how such secondary use would ever be implemented or enforced. A secondary radio service can claim no protection whatsoever from a primary radio service. Verbal and operational battles between unlicensed “secondary” FRS users and GMRS licensees would inevitably result from Uniden's irresponsible proposal to allocate FRS higher transmitter power levels on a secondary basis to GMRS primary users. Indeed, such battles are already occurring between unlicensed FRS and licensed GMRS users on their shared channels.

18. The changes that Uniden proposes would render GMRS handheld operations absolutely no advantage or protection from interference from FRS operations, as alleged by Uniden (Further Comments, page 9). Indeed, if the changes proposed by the FCC and Uniden were to be adopted, FRS and GMRS handheld operations would technically be exactly identical except for the permissible signal bandwidth, a difference that completely disappears in real-world operations.

19. Each of the four changes proposed by Uniden and cited above would work to the disadvantage of licensed GMRS users, and is **unacceptable** to the licensed GMRS public. Their implementation would be very destructive to this valuable personal radio service.

#### IV. Unlicensed GPS Use by Ineligible Parties.

20. Garmin openly admits that its GPS-capable GMRS units are used at GMRS-only high-power levels by public safety agencies, including (incredibly) the U.S. Secret Service (Garmin comments at page 10, in Attachments at A-11, and elsewhere). Garmin prides itself on providing GMRS-based GPS capabilities to this federal agency ineligible to license in *any* FCC-regulated service. Garmin documents (in the Attachments to its comments at A-12 and A-13, and elsewhere) that state and local public safety agencies use these GMRS-based GPS units for surveillance, and needs the GMRS-only high power to increase the viability of their surveillance communications.

21. Does Garmin really expect us (and the FCC) to believe that this use is authorized under personal GMRS licenses issued to each agency officer? That these agency employees would license individually and thus reveal their personal names and mailing addresses in the FCC ULS licensing database? That these officers would identify with their personal callsigns as required by the FCC rules? That these individuals would actually share the available frequencies with “civilians”?

22. What was Garmin thinking? Garmin admits to having actively and aggressively perverted the Commission's intent about who is eligible to license and operate in the GMRS, a *personal* radio service. Now Garmin wants to be rewarded for its cavalier attitude towards basic GMRS eligibilities.

**23. This behavior is in such egregious violation of the rules that the Commission must re-examine the propriety of continuing the waiver exemptions under which it authorizes Garmin to manufacture and market radio devices which otherwise violate the Commission's requirement that the GMRS may be used *only* for voice communications.**

24. This Garmin misconduct emphasizes the need for the Commission immediately to open a thorough and fully public investigation and inquiry into the needs for GPS-related data communications, as requested in the PRSG comments at paragraph 79 (page 15).

25. The Commission should postpone or cancel all further proposals to modify or to expand its rules governing GMRS use for GPS- or any other non-voice-based communications.

## V. The Use of CB Directional Antennas and GMRS “Fixed Stations.”

26. Stanton Walters, alleged to be filing comments on behalf of the REACT International, Inc. Board of Directors, supports the concept (Walters comments, page 3) to “prohibit the use of directional antennas in the CB Radio service.”

27. For many years, REACT and other CBRs Channel 9 monitors have used 2-, 3-, and 4-element, rapidly electronically switchable arrays to assist in getting “a fix” on the bearing of incoming signals, to assist in determining the location of callers reporting emergencies or requesting local travel assistance. Experienced monitors can often rapidly determine within as narrow as 45 degrees such bearings within just 3 or 4 seconds. They can determine even more precise bearings, although not as rapidly, by using highly directional, steerable multi-element beam antennas.

28. Given this capability and experience, we find it incomprehensible that Walters and/or REACT International, Inc. would recommend the prohibition of directional antennas in the CBRs. This Walters comment evidences a serious disconnect from a common, lawful and highly beneficial practice in the CBRs by REACT monitors.

29. Walters claims (Walters comments at page 1, paragraph “n”) that rule 95.29(g), governing fixed-station operation in the GMRS (station class “FX”), is used by many REACT stations. **This is flat out wrong.** In our search of the GMRS licensing database prior to the change in the database contents (which no longer show fixed station authorizations), there were *no* such REACT licenses, and *never* have been. Walters misunderstands this provision in the GMRS rules.

## VI. Delicensing of the GMRS.

30. The vast majority of those who submitted comments who are GMRS licensees supported the continuation of GMRS licensing, but with a reduction in the licensing fees. PRSG strongly supports this position, but notes in our Comments that such a fee reduction would first require a change in the way in which the FCC assesses these fees. The NPRM proposes no such change.

31. PRSG warns that delicensing would signal that the Commission has abandoned any effort to enforce its rules. That would bring chaos, and would make further enforcement a practical impossibility.

## **VII. Conclusions.**

32. The Commission should continue to prohibit the use of any voice obscuring technologies in the various personal radio services.

33. The Commission should abandon or at least postpone any further consideration of expanding the permissibility of GPS- or other data-based communications in the GMRS or FRS.

34. The Commission should terminate any consideration of increasing the transmitter output power or the number of channels available for unlicensed use in the FRS.

35. The Commission should retain licensing for the GMRS

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## **CERTIFICATE OF SERVICE**

I hereby certify that on September 20, 2010, I have mailed a copy of these PRSG Reply Comments via First Class US postage to each of the following parties:

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